

ABSTRACT OF THE DISCLOSURE

A magnetron in accordance with the present invention is configured so that an antenna lead 17 connected to a desired position of an anode segment 2 passes through a magnetic pole piece 7 and a metal cylinder 8 so as not to make contact therewith and is connected to the output portion of the magnetron, and so that the electrical length  $L_1$  of this antenna lead 17 between the opening end of a third harmonic restraint choke 15 and the connection portion of the anode segment 2 is  $1/2$  of the wavelength ( $\lambda$ ) of the third harmonic, thereby restraining the third harmonic and the side bands of the third harmonic.